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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,213	11/04/2003	Kazutaka Fukuda	FY.50738US0A	5158
20995	7590	12/29/2005	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			WALTERS, JOHN DANIEL	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			3618	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/701,213		FUKUDA, KAZUTAKA	
	Examiner		Art Unit	
	John D. Walters		3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>11/04/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claims 1 – 21 have been examined.

Drawings

The drawings are objected to because

- reference and figure numbers are hand written and difficult to discern;
- reference numbers written within the boundaries of the drawing figures are very difficult to discern;
- as complete analysis of reference numbers cannot currently be completed due to the illegibility of the hand written characters, Applicant is requested to ensure that all reference numbers described in the specification are located within the drawings and all reference numbers located within the drawings are described within the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 3 and 6 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi (JP 09-170039) in view of Fukuda (JP 10-188894). Takashi discloses a cooling belt chamber of vehicle for off road travel comprising:

- a frame defining an engine compartment (Fig. 4, item 2);
- an engine mounted within said compartment (Fig. 4, item 30);
- a crankcase (Fig. 14, item 30a);
- a crankshaft (Fig. 13, item 32);
- a transmission disposed within a transmission chamber (Fig. 13, item 31);
- a drive pulley connected to a transmission primary shaft (Fig. 13, item 52);
- a first end of said primary shaft being supported by said crankshaft (Fig. 14);
- a driven pulley (Fig. 13, item 54);

- a drive belt connecting said drive and said driven pulleys (Fig. 13, item 55);
- an air inlet (Fig. 13, item 51a);
- an air guide, i.e. transmission cover (Fig. 13, item 51)
- said air guide extending along approximately half of the circumference of the drive pulley (Fig. 13).

Takashi does not make use of a support bracket to hold the second end of the primary shaft. Fukuda, however, discloses a crankcase cover comprising:

- a support bracket comprising a plurality of legs (Fig. 6a and 6b);
- wherein an air guide is connected to at least two of said legs (Fig. 6a and 6b);
- wherein a rearward pair of said legs extend from the point of intersection at an obtuse angle from one another (Fig. 6a and 6b);
- wherein said rearward legs extend substantially perpendicular to a force exerted on the primary shaft by the drive belt (Fig. 6a and 6b);
- wherein said legs include a ribbed reinforcing portion extending radially along the length of said legs (Fig. 6b);
- wherein said bracket includes a generally circular reinforcing member having a diameter substantially the same size as a diameter of said drive pulley (Fig. 6a and 6b, item 56);
- wherein said reinforcing member includes a plurality of mounting portions configured to be connected to said crankcase (Fig. 6a and 6b, item 55a);
- wherein said legs further comprise a plurality of flanges comprising a plurality of positioning holes (Fig. 6a and 6b, item 55a);

- a transmission case comprising an inner and outer portion said inner portion being connected to said crankcase and said outer portion being connected to said inner portion (Fig. 5, items 53 and 60);
- wherein said transmission case is made of a resin-based material (paragraph 28).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the support bracket of Fukuda with the cooling belt chamber of Takashi in order to provide additional support and rigidity over said pulley location.

Claims 4, 5, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takashi (JP 09-170039) in view of Fukuda (JP 10-188894) as applied to claims 1 – 3 and 6 – 19 above, and further in view of Takayama (6,267,700). Takashi in view of Fukuda does not disclose a separate spiral air guide. Takayama, however, discloses a cooling system for a vehicle power unit comprising:

- an air guide, i.e. baffle plate, formed into a spiral which increases in distance from said drive pulley from a first end to a second end (Fig. 13, item 48).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine the spiral guide of Takayama with the cooling belt chamber of Fukuda in view of Takashi in order to provide increased control of the speed and direction of cooling air.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Eastman et al. (4,697,665) discloses an air cooled transmission;
- Takahashi et al. (4,712,629) discloses an engine and drive belt cooling system;
- Pestotnik (6,128,784) discloses an all-terrain vehicle drive train;
- Ohyama et al (2001/0029215) discloses a belt type transmission.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John D. Walters whose telephone number is (571) 272-8269. The examiner can normally be reached on Monday - Friday, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

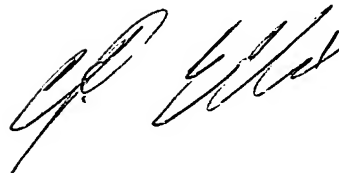
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/701,213
Art Unit: 3618

Page 7

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Examiner
Art Unit 3618

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